

# WSDOT Airport and Compatible Land Use Program



# **Airport and Compatible Land Use Program**

**Carter Timmerman**

Aviation Planner  
WSDOT Aviation

**Paula Hammond**

Secretary of Transportation

**Steve Reinmuth**

Chief of Staff

**John Sibold**

Aviation Division Director



**Washington State  
Department of Transportation**

# Presentation outline:

- Aviation and requirements of Washington state law
- Definitions: Compatible and incompatible land uses
- How to plan for compatibility
- Question-and-answer period

# What benefits can aviation bring to Washington communities?



# Airports and state law



- Airports are Essential Public Facilities  
(RCW 36.70A.200)
- Airports are part of the multi-modal transportation system  
(RCW 36.70A.070)
- Towns, cities and counties must discourage incompatible land uses  
(RCW 36.70.547, 36.70A.510; 35A.63.270; 35.60.250)
- Towns, cities and counties must consult with aviation interests  
(RCW 36.70.547, 36.70A.510; 35A.63.270; 35.60.250)
- WSDOT Aviation must provide technical assistance  
(RCW 36.70.547, 36.70A.510; 35A.63.270; 35.60.250)

# Encroachment and Anacortes Airport

1974



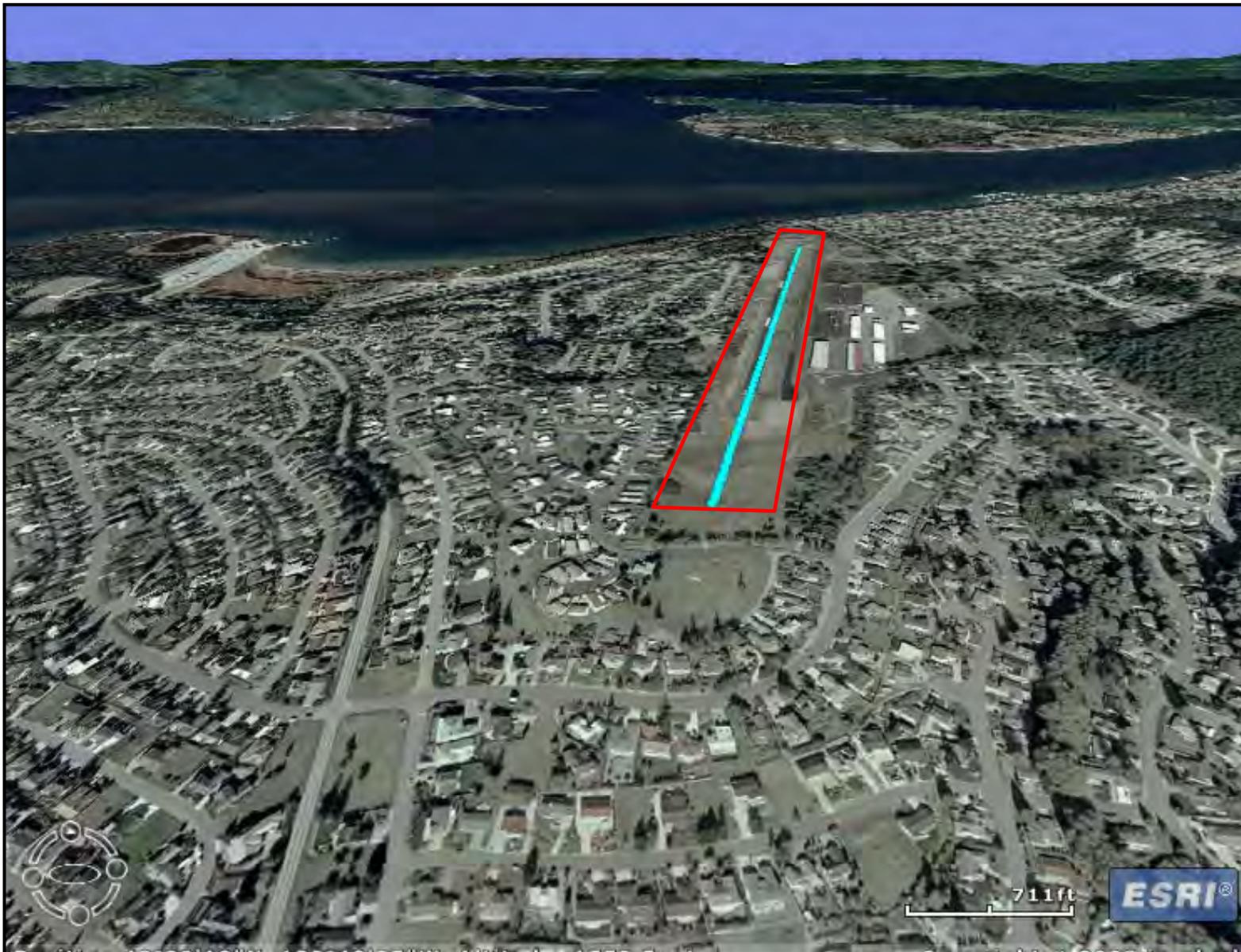
1986



1995



# Anacortes Airport today



# Consequences of conflict

- Degraded airport operations
- Impeded airport expansion
- Hampered economic development
- Reduced neighborhood quality of life



# What is compatible land use?

Aviation-related



Industrial / commercial



Agriculture



# What is incompatible land use?



Wildlife attractants



Height hazards



Residential development

# Incompatible land uses



Daycares



Places of worship, temples, mosques, etc



Smoke or steam



Schools



Hospitals and adult-care facilities

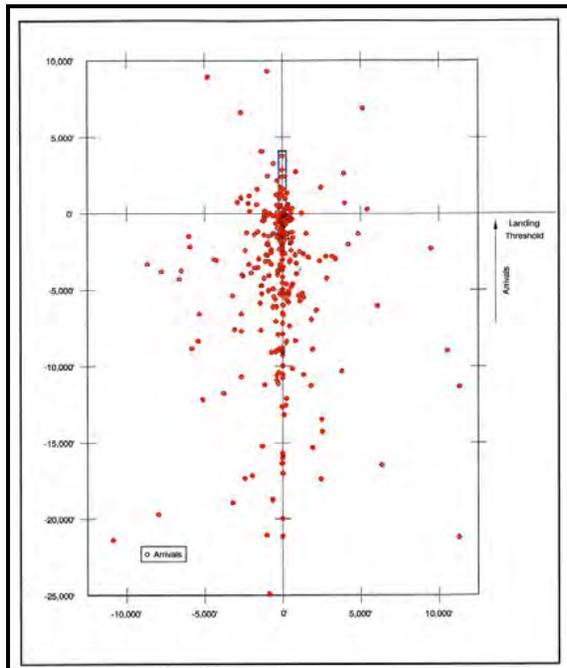


Flammable liquids, etc

# Safety

## Historic accident data

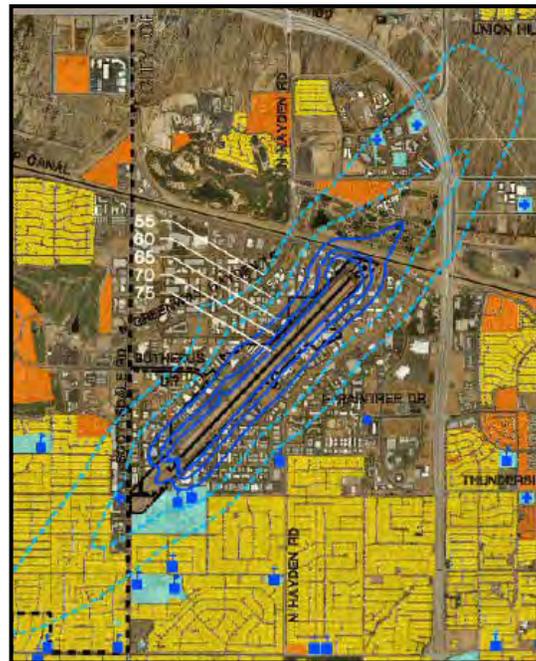
● *Denotes aircraft accidents*



# Noise

## Noise-sensitive uses

*Noise Sensitivity*

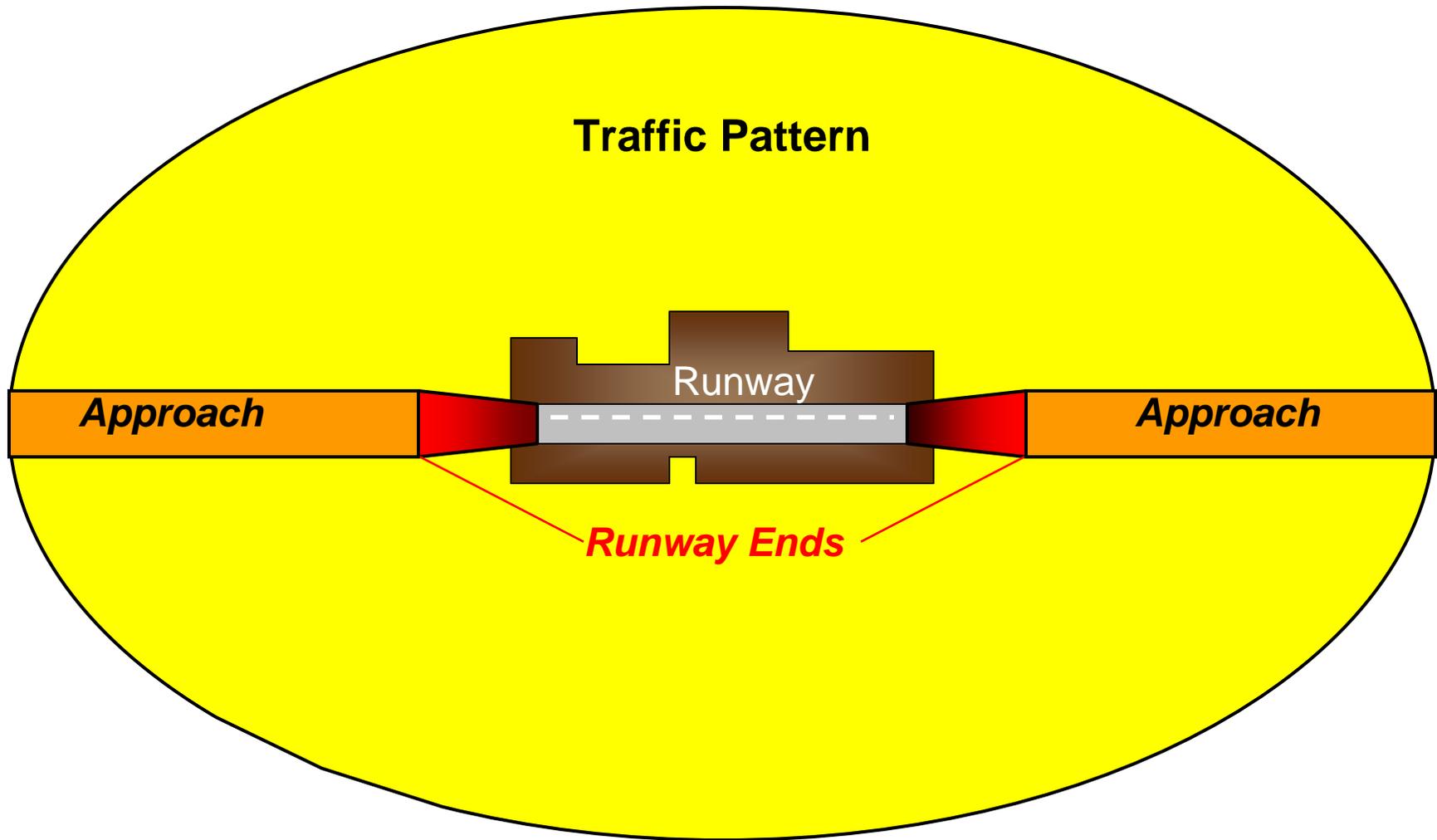


# Height hazards

## Naturally occurring and manmade objects



# Let's examine some very general airport environments



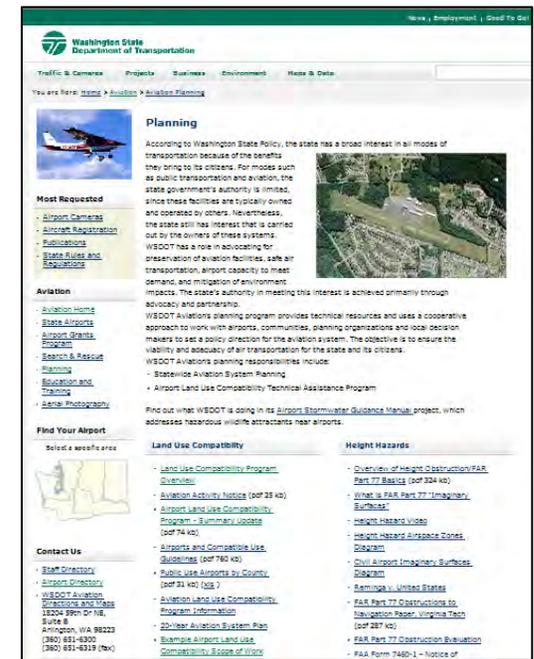
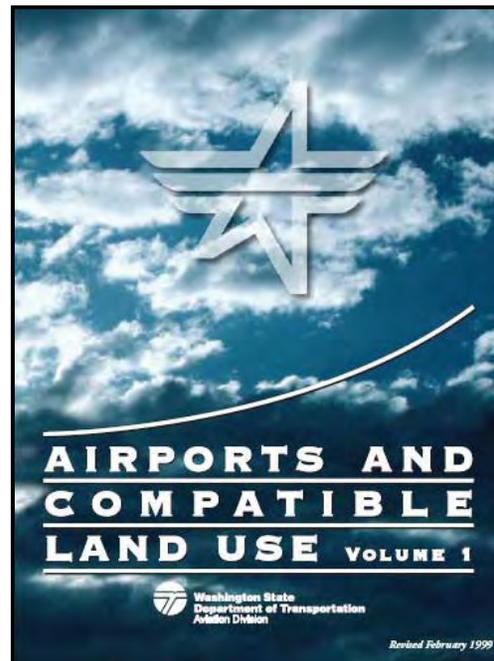
## Table: General land-use acceptability

<b>Typical land-use types</b>	<b><i>Airport proximity</i></b>	<b><i>Near runway ends</i></b>	<b><i>Within runway approaches</i></b>	<b><i>Beneath traffic patterns</i></b>
	<b>Agricultural</b>	<b>Compatible if not wildlife attractant</b>	<b>Compatible if not bird attractant</b>	<b>Compatible if not wildlife attractant</b>
	<b>Utilities/ transportation</b>	<b>Avoid</b>	<b>Compatible</b>	<b>Compatible</b>
	<b>Parks / recreation</b>	<b>Incompatible</b>	<b>Compatible if low intensity</b>	<b>Compatible</b>
	<b>Industrial</b>	<b>Compatible at low density</b>	<b>Compatible if does not produce airspace obstructions or have bulk amounts of hazardous materials</b>	<b>Compatible if does not produce airspace obstructions</b>
	<b>Retail / service uses</b>	<b>Incompatible</b>	<b>Compatible if low intensity</b>	<b>Compatible</b>
	<b>Offices</b>	<b>Incompatible</b>	<b>Compatible if low intensity</b>	<b>Compatible</b>
	<b>Light Industrial</b>	<b>Compatible at low intensity</b>	<b>Compatible if low intensity</b>	<b>Compatible</b>
	<b>Places of worship</b>	<b>Incompatible</b>	<b>Incompatible</b>	<b>Avoid</b>
	<b>Residential</b>	<b>Incompatible</b>	<b>Incompatible</b>	<b>Incompatible</b>
	<b>Children's schools</b>	<b>Incompatible</b>	<b>Incompatible</b>	<b>Incompatible</b>
<b>Hospitals / nursing homes</b>	<b>Incompatible</b>	<b>Incompatible</b>	<b>Incompatible</b>	

# Washington's Airport Land Use Compatibility Program

1999 guidelines and Web site resources:

- Historic perspective
- Process
- Tools
- Strategies
- Worksheets
- Consultation process
- Flexibility



# **WSDOT's land use compatibility process**

**Step 1: Getting started and gathering data**

Historic accident data

FAR Part 77 Airspace Surfaces

Traffic pattern

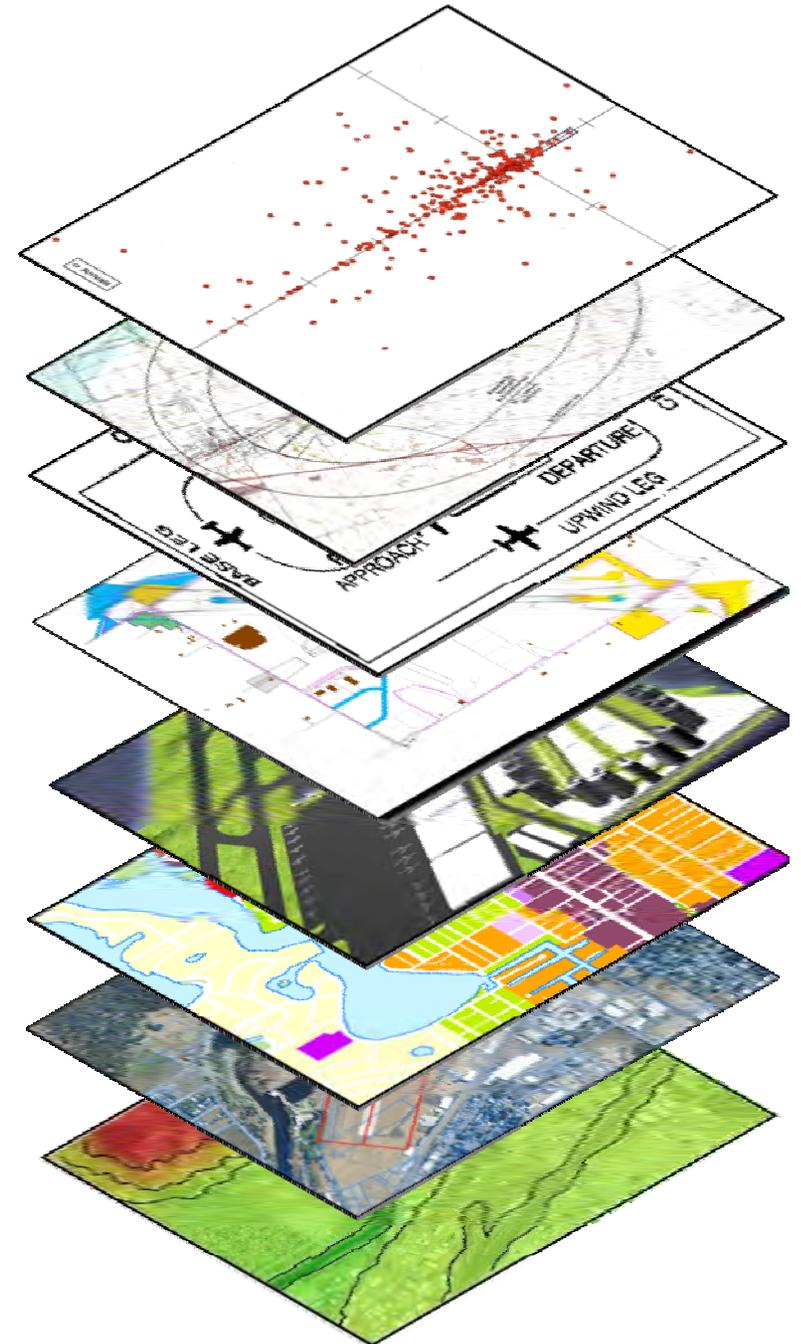
Airport master plan and airport layout plan

Community comprehensive plan

Existing land uses

Parcel layer

Topography



# **WSDOT's land use compatibility process**

**Step 1: Getting Started and Gathering Data**

**Step 2: Delineate the Airport Influence Area**

**Step 3: Identify Compatibility Concerns**

**Step 4: Adopt and Implement the Policies**

**Step 5: Identify Tools and Adopt Regulations**

# Step 1: Getting started and gathering data

**Description** - *Conduct preliminary work needed to initiate the compatibility planning process*

- Contact WSDOT Aviation for a preliminary consultation .
- Identify your jurisdiction's responsibilities.
- Identify stakeholders.
- Prepare public participation plan.
- Gather airport information and community data
  - Airport Master Plan and Layout Plan
  - Airport facilities, services and activities
  - Interviews with airport managers and pilots
- Gather existing land use constraint maps and parcel information.
- Gather comprehensive plans and implementation regulations.

## Step 2: Delineate the airport influence area

**Description** - *Define the area you need to consider for land use planning*

- Airport influence area
- Aircraft operations and use
- Aircraft traffic pattern
- Overflight impacts
- Airspace impacts
- Safety impacts
- Existing land use impacts on the airport
- Airport's impacts on surrounding land uses

# Definition of airport influence area

- "Airport influence area" means the area adjacent to a public use airport that can affect or be affected by airports and aircraft operations."
- This sphere of influence is contained within airport traffic patterns, aircraft over flight and safety areas, and airspace surfaces critical for air navigation addressed under chapter 14.12 RCW and Federal Aviation Regulations (FAR) Part 77.
- The airport influence area is used to identify the geographic area that should be considered during the airport land use compatibility planning process.
- "Airport influence area" includes terrestrial land uses and the navigable airspace necessary to address land use compatibility adjacent to airports.

## Step 3: Identify compatibility concerns

**Description** - *Examine the level of compatibility in your community.*

- Evaluate the land use character of the airport influence area.
- Evaluate land use compatibility features.
- What potential compatibility conflicts are on the horizon?
- Determine compatibility concerns need to be addressed.

# Step 4: Develop compatibility policies

**Definition** - *Examine the various policy and regulatory strategies available to pursue airport land use compatibility and amend comprehensive plans*

- Identify compatible land use adjacent to airports.
- What does it mean to discourage incompatible land uses?
- What compatibility policies are already in place?
- Identify airport facilities and support facilities in the comprehensive plan.
- What new comprehensive plan policies are needed?

# What should a comprehensive plan include?

## Ideally:

- A map identifying the airport influence area
- Narrative report regarding the airport
  - Description of the airport facilities and operations, existing and future
  - Identify the role of airport/s in local and regional economic development
  - Its role in the Washington State System Plan
- Policies:
  - Discourage incompatible development
  - Recognize the airport as an Essential Public Facility
  - Identify and protect Part 77 Imaginary Airspace Surfaces
  - Promote compatible uses: aviation-related, light industrial, commercial or agriculture
  - References in transportation and capital facilities elements
  - Levels of service

# Step 5: Implement the strategies

**Description** - *What Implementation measures and strategies are needed?*

- Identify and adopt strategies that can be used to respond to compatibility planning challenges.
- Identify zoning measures to implement the comprehensive plan.
- Designate compatible land uses on the zoning map.
- What actions are necessary to ensure continued implementation of the policies?
- Review policies and development regulations on a regular base to monitor progress.

# Land use strategies and implementation tools

Direct zoning  
Airport overlay ordinance  
Direct zoning and airport overlay  
Mixed use zoning  
Infill development  
Transfer of development rights

Airport stormwater design manual  
Control airspace obstructions  
Limit high-intensity uses  
Fly-friendly procedures  
Wireless communication ordinance  
Wind energy systems ordinance

## In review:

- ✓ Aviation and requirements of Washington state law
- ✓ Definitions: Compatible and incompatible land uses
- ✓ Compatibility exercise
- ✓ WSDOT's 5 step process



## Contact information:

**Carter Timmerman**

Aviation Planner  
WSDOT Aviation

***timmerc@wsdot.wa.gov***

or

**360.651.6312**

